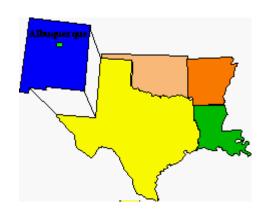
# FRUIT AVENUE PLUME SUPERFUND SITE Albuquerque, NM

EPA Region 6 EPA ID# NMD986668911

Hazard Ranking System (HRS) Score: 50

**State Congressional District: 1** 

Fact Sheet Updated: February 27, 2003



# SITE DESCRIPTION \_

**Location**: The Fruit Avenue Plume Site is located within the city limits of Albuquerque,

Bernalillo County, Central New Mexico.

**Setting:** The contamination is contained in an aguifer underlying a portion of downtown

Albuquerque, predominantly in the central business district.

The suspected source of the trichloroethene (TCE) is a defunct dry cleaning facility, "Elite Cleaners," which operated from approximately 1940-1970. The estimated size of the plume is 2/3 mile long, 550 to 1300 feet wide, and at least 544 feet deep.

**Population:** There are 187,327 people who receive their drinking water from wells within a four-

mile radius of the source site. Within one mile of the site, the total population is approximately 6,000, a large percentage of which are workers, not full-time residents. There are two hospitals and two City of Albuquerque municipal wells

located 1 to 1 3/4 miles from the source site.

# PRESENT STATUS AND ISSUES \_\_\_\_\_

- EPA and NMED are currently in the Remedial Design Phase of the project.
- EPA is currently working on drafting the 65% design document which is expected to be released in early March 2003.

# WASTES AND VOLUMES \_

The primary contaminant of concern is TCE, a chlorinated solvent, found at levels up to 90 micrograms per liter ( $\mu$ g/L) in the groundwater. The Maximum Contaminant level (MCL) that is allowed under the Clean Water Act is 5  $\mu$ g/L. Tetrachloroethene (PCE), cis-1,2-Dichloroethene (cis-DCE), and trans-1,2-Dichloroethene (trans-DCE) are also found in the groundwater plume.

There are three different zones of contamination within the aguifer:

- (1) shallow zone, 30 feet to 60 feet below the ground surface (bgs) with TCE levels from  $1\mu g/L$  to  $11\mu g/L$ ;
- (2) intermediate zone, 60 feet to 120 feet (bgs) with TCE levels from 1µg/L to  $90\mu g/L$ ; and
- (3) deep zone, 120 feet to 600 feet (bgs) with TCE levels from 1µg/L to 42µg/L.

Chlorinated solvents are heavier than water and readily sink in groundwater. An exact or calculated volume of the chlorinated solvent (TCE) released into the groundwater at the former site of Elite Cleaners is unknown at this time. However, very small amounts of these chemicals can contaminate large volumes of soil and groundwater.

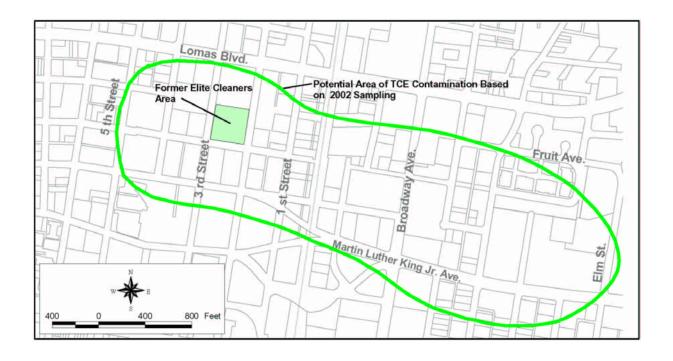
The area of contamination consists only of the subsurface soils and groundwater. Therefore, the ground surface conditions are safe for people who live, work, and visit the area in the immediate vicinity of the former Elite Cleaners.

# NATIONAL PRIORITIES LIST \_

NPL Inclusion Proposal Date: July 22, 1999 NPL Inclusion Final Date: October 23, 1999

NPL Deletion Proposal Date: n/a NPL Final Deletion Date: n/a

# SITE MAP \_\_



2.

#### SITE HISTORY

- 1940-1972: The Site operated as a dry cleaning facility.
- 1989: Sight Discovery The City of Albuquerque Environmental Health Department (AEHD) detected TCE in the Coca-Cola Bottling Plant well in downtown Albuquerque during a routine sampling effort.
- December 7, 1989: The New Mexico Environment Department (NMED) conducted a Preliminary Assessment and completed a report entitled, "PA Narrative of the Albuquerque Industrial Center." The objective of the PA was to identify potentially responsible parties (PRPs) and remove underground tanks once used for chlorinated hydrocarbon containment at the Elite Cleaner's site.
- October 15, 1990: The NMED conducted a Screening Site Inspection (SSI) of the Elite Cleaners site, thought to be a likely source of the TCE groundwater contamination, and completed a report of the investigation entitled, "Screening Site Inspection of Elite Cleaners." The objective of the SSI was to install monitoring wells and determine the extent of the groundwater TCE plume.
- 1993: Environmental Consultant, Dames and Moore, Inc., conducted a Phase II Environmental Site Assessment in downtown Albuquerque near the former Norwest Bank building, collecting more information concerning soil and groundwater TCE contamination. In February, May and August of 1993, the NMED conducted an Expanded Site Investigation (ESI) of the former Elite Cleaners site.
- September 21, 1994: The NMED completed the ESI report entitled, "Expanded Site Inspection of the Elite Cleaners Site."
- February 10, 1999: A Background Investigative (BI) report was completed by the NMED to further research possible source areas of the TCE groundwater contamination and delineate the extent of the TCE groundwater plume.
- July 1999: The Fruit Avenue Plume Site was proposed to be listed as a Federal Superfund Site on the National Priority List (NPL) by the Environmental Protection Agency (EPA).
- October 1999: The Fruit Avenue Plume Site was added to the NPL as a State lead Superfund Site with the cooperation of the EPA, the NMED, and the City of Albuquerque.
- March 2001: The Remedial Investigation (RI) report was finalized for the Site. The former Elite Cleaners was identified as the primary source of contamination, and the extent of the TCE groundwater plume was delineated.
- June 2001: The Feasability Study (FS) report was finalized for the Site. This report details the alternatives that were evaluated as possibilities for site remediation. The Proposed Plan, which discussed the most viable alternatives for site remediation was issued on June 27, 2001.

- A public comment period on the Proposed Plan was held from June 29, 2001 through July 30, 2001.
- The Record of Decision was issued on September 27, 2001.

# HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT \_\_

There is a potential for elevated health/ecological risk levels associated with the two types of chlorinated hydrocarbon compounds, TCE and PCE, involved in dry cleaning spot removal and machine shop/industrial equipment degreasing activities.

TCE and PCE are the leading concerns at this site because they are known carcinogens recognized by the Resource Conservation and Recovery Act (RCRA).

#### Other Health Considerations:

- The Coca-Cola production well had to be removed from service in 1989 when TCE levels exceeded its Maximum Contamination Limit (MCL) of 5.0 µg/L.
- The St. Joseph Hospital well was removed from service in December of 1996 when TCE levels approached the MCL. In 1997, this well exceeded the MCL for TCE.
- The Presbyterian Hospital well was showing levels of TCE below the MCL in 1999.
- The City of Albuquerque municipal well, Yale 1, exhibited trace levels of TCE and PCE in 1999. It is unknown whether the contamination source of Yale 1 is from the Site; however, Yale 1 well is located down gradient of the Site.

# RECORD OF DECISION \_\_\_\_\_

Record of Decision Signed: September 27, 2001

The major components of the Selected Remedy, Soil Vapor Extraction plus Hot Spot Treatment and Shallow, Intermediate, and Deep Zone Restoration through Pump and Treat Technology with a Reinjection Component, consist of:

- Soil Vapor Extraction of contaminants from soil located on the source area property,
- Remediation of contamination Hot Spots in the shallow and intermediate ground water that underlies the source area property by injecting either a bioremediation additive or a chemical oxidant into the subsurface in order to degrade the contaminants of concern in place,
- Extraction and treatment of contaminated shallow, intermediate, and deep zone ground water by using a pump and treat system consisting of air stripping and granulated activated carbon, and by re-injecting a portion of the treated water,
- Placement of a restrictive covenant on the source property requiring that the asphalt cap remain on the source property until remediation goals for the soil are met,

- Implementation of ground water use restrictions until remediation goals for ground water are met, and
- Annual ground water monitoring to assess the extent of contamination and risks to human health.

# COMMUNITY INVOLVEMENT \_\_\_\_\_

Site Mailing List: 115 people

EPA Open House Meetings: February 7, 2000; June 19, 2001

ROD Public Comment Period: June 29-July 30, 2001

Proposed Plan Public Meeting: July 17, 2001

Site Status Fact Sheets: July 1999; June 2001 Community Relations Plan: Issued March 2000

Constituency Interest: Nearby residents are concerned about human health and real

estate values. The community is supportive of EPA efforts.

Site Repository: Albuquerque Public Library-Main Branch

501 Copper Avenue NW

Albuquerque, New Mexico 87102

(505) 768-5140

#### TECHNICAL ASSISTANCE GRANT

Availability Notices: July 22, 1999, October 22, 1999,

Letter of Intent Received: September 10, 2001,

Downtown Action Team

111 Fifth Street

Albuquerque, NM 87102

505-243-2230

Final Application Received and TAG awarded: 5/15/02

Technical Advisor Hired: 10/21/02 - R. T. Hicks Consultants, Ltd., Albuquerque, NM.

# **SITE CONTACTS**

EPA Remedial Project Manager:	Kathleen Aisling	214-665-8509 or
		1-800-533-3508
Site Attorney:	James Costello	214-665-8045 or
		1-800-533-3508
Community Involvement:	Kathleen Aisling	214-665-8509 or
		1-800-533-3508
NMED Project Manager:	Birgit Landin	505-827-9669
EPA Ombudsman:	Arnold Ondarza	1-800-533-3508

# **REALIZED CLEANUP BENEFITS**

- Remediation of the contaminated media will reduce the health and ecological risk associated with the contaminants.
- Although only the sub-surface earth material and ground water are contaminated with TCE and PCE, the total land value will rise and the cleanup will encourage future business investments in the downtown Albuquerque business district.